

**BILLING CODE 3510-22-P** 

### DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

RIN 0648-XD444

Takes of Marine Mammals Incidental to Specified Activities; Taking Marine Mammals
Incidental to San Francisco Bay Area Water Emergency Transportation Authority Central Bay
Operations and Maintenance Facility Project in Alameda, California

AGENCY: National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Commerce.

ACTION: Notice; proposed incidental harassment authorization; request for comments.

SUMMARY: NMFS has received an application from the San Francisco Bay Area Water Emergency Transportation Authority (WETA) for an Incidental Harassment Authorization (IHA) to take marine mammals, by harassment, incidental to a proposed Central Bay Operations and Maintenance Facility Project. Pursuant to the Marine Mammal Protection Act (MMPA), NMFS is requesting comments on its proposal to issue an IHA to WETA to incidentally take, by Level B Harassment only, marine mammals during the specified activity.

DATES: Comments and information must be received no later than [INSERT DATE 30 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: Comments on the application should be addressed to Jolie Harrison, Chief, Permits and Conservation Division, Office of Protected Resources, National Marine Fisheries Service, 1315 East-West Highway, Silver Spring, MD 20910. The mailbox address for providing email comments is itp.guan@noaa.gov. Comments sent via e-mail, including all

attachments, must not exceed a 25-megabyte file size. NMFS is not responsible for comments sent to addresses other than those provided here.

Instructions: All comments received are a part of the public record and will generally be posted to <a href="http://www.nmfs.noaa.gov/pr/permits/incidental.htm">http://www.nmfs.noaa.gov/pr/permits/incidental.htm</a> without change. All Personal Identifying Information (for example, name, address, etc.) voluntarily submitted by the commenter may be publicly accessible. Do not submit Confidential Business Information or otherwise sensitive or protected information.

An electronic copy of the application may be obtained by writing to the address specified above, telephoning the contact listed below (see FOR FURTHER INFORMATION CONTACT), or visiting the internet at: <a href="http://www.nmfs.noaa.gov/pr/permits/incidental.htm">http://www.nmfs.noaa.gov/pr/permits/incidental.htm</a>. Documents cited in this notice may also be viewed, by appointment, during regular business hours, at the aforementioned address.

NMFS is also preparing an Environmental Assessment (EA) in accordance with the National Environmental Policy Act (NEPA) and will consider comments submitted in response to this notice as part of that process. The EA will be posted at the foregoing internet site once it is finalized.

FOR FURTHER INFORMATION CONTACT: Shane Guan, Office of Protected Resources, NMFS, (301) 427-8401.

#### SUPPLEMENTARY INFORMATION:

## Background

Sections 101(a)(5)(A) and (D) of the MMPA (16 U.S.C. 1361 et seq.) direct the Secretary of Commerce to allow, upon request, the incidental, but not intentional, taking of small numbers of marine mammals by U.S. citizens who engage in a specified activity (other than commercial

fishing) within a specified geographical region if certain findings are made and either regulations are issued or, if the taking is limited to harassment, a notice of a proposed authorization is provided to the public for review.

An authorization for incidental takings shall be granted if NMFS finds that the taking will have a negligible impact on the species or stock(s), will not have an unmitigable adverse impact on the availability of the species or stock(s) for subsistence uses (where relevant), and if the permissible methods of taking and requirements pertaining to the mitigation, monitoring and reporting of such takings are set forth. NMFS has defined "negligible impact" in 50 CFR 216.103 as "an impact resulting from the specified activity that cannot be reasonably expected to, and is not reasonably likely to, adversely affect the species or stock through effects on annual rates of recruitment or survival."

Except with respect to certain activities not pertinent here, the MMPA defines "harassment" as: any act of pursuit, torment, or annoyance which (i) has the potential to injure a marine mammal or marine mammal stock in the wild [Level A harassment]; or (ii) has the potential to disturb a marine mammal or marine mammal stock in the wild by causing disruption of behavioral patterns, including, but not limited to, migration, breathing, nursing, breeding, feeding, or sheltering [Level B harassment].

## Summary of Request

On April 9, 2014, NMFS received an application from WETA for the taking of marine mammals incidental to the construction of a Central Bay Operations and Maintenance Facility.

After NMFS provided comments on the draft IHA application, WETA submitted a revised IHA application on May 15, 2014. NMFS determined that the application was adequate and complete on July 31, 2014.

WETA proposes to construct a Central Bay Operations and Maintenance Facility (Project) to serve as the central San Francisco Bay base for WETA's ferry fleet, Operations Control Center (OCC), and Emergency Operations Center (EOC) in the City of Alameda in California. The proposed activity would occur between August 1 and November 30, 2015. The following specific aspects of the proposed activities are likely to result in the take of marine mammals: pile removal and vibratory and impact pile driving. Take, by Level B Harassment only, of individuals of California sea lion and Pacific harbor seal is anticipated to result from the specified activity.

Description of the Specified Activity

## Overview

The Project would involve construction of the WETA Central Bay Operations and Maintenance Facility in the City of Alameda, California. This Project would require the removal of 35 existing concrete piles and the installation of 61 steel piles by impact hammer and 24 plastic piles by vibratory hammer in San Francisco Bay. Once constructed, the facility would provide maintenance services, such as fueling, engine oil changes, concession supply, and light repair work, for WETA ferry boats operating in the central San Francisco Bay. In addition, the facility would be the location for operational activities of WETA, including day-to-day management and oversight of services, crew, and facilities. In the event of a regional disaster, the facility would also function as an emergency operations center, serving passengers and sustaining water transit service for emergency response and recovery.

### Dates and Duration

WETA plans to conduct all in-water construction work activities during the period from August 1 to November 30, 2015. Pile removal and installation would occur over only approximately 12 days during that period, and these activities would not be continuous.

For pile removal, the contractor conducting the removal will finalize the most effective method of removing the existing piles. Once the contractor has an effective method in place, it should take approximately 30 minutes to extract each pile. Thirty-five piles would be removed, requiring a total of approximately 17½ hours. This time would be spread over a period of three days and would not be continuous.

For pile installation, the structural steel piles would be driven in place by a diesel impact hammer. Each pile would require approximately 450-600 hammer strikes to be put in place. This is an estimated number of strikes, as limited geotechnical exploration has been performed at the site and the required structural capacity of the piles is yet to be determined. It is estimated that 3 to 12 piles would be driven per day during in-water pile driving operations, with an actual drive time for each pile ranging from 10 to 30 minutes per pile, assuming the hammer operates continuously. Sixty-one steel piles would be installed, requiring a total of approximately 10 to 30½ hours.

The plastic fender piles would likely be driven into place with a vibratory hammer, which would not create significant underwater noise. It would require 15 to 30 minutes of vibration to put each plastic pile in place. Twenty-four plastic piles would be installed, requiring a total of approximately 6 to 12 hours. All of the pile driving, including installation of the steel and plastic piles, will be spread over a period of ten days and would not be continuous.

# Specified Geographic Region

The Project site is located southeast of the intersection of West Hornet Avenue and Ferry Point Road near Pier 3 in the City of Alameda (see Figure 1 of the IHA application). The Project site is within the Alameda Naval Air Station (NAS) Base Realignment and Closure (BRAC) area, now known as Alameda Point (see Figure 2 of the IHA application). The former Alameda NAS, which was closed in 1997, occupied roughly 1,700 acres of land and roughly 1,000 acres of water. The Project site is owned by the City of Alameda and was leased to the United States Navy as part of the NAS.

The Project site includes approximately 21,500 square feet (0.5 acre) of landside space and approximately three acres of waterside space in San Francisco Bay. The Project site is designated as Mixed Use Planned Development District (MX) and is zoned General Industrial District (M-2) by the City of Alameda.

### **Detailed Description of Activities**

The Project has three elements involving noise production that may impact marine mammals:

- Removal of 35 existing concrete piles;
- Installation of 61 steel piles (twenty-six 30" epoxy coated steel guide piles for floats, eleven 24" piles for shoreline deck, sixteen 24" epoxy coated steel dolphin piles, and eight 18" epoxy coated steel fender panel piles) via impact hammer; and
- Installation of 24 plastic piles (18" plastic fender piles) via vibratory hammer.

Detailed descriptions of these activities are provided below.

### Pile Removal

Thirty-five (35) existing concrete piles will be removed as part of the Project. In general, the piles will be removed by attaching a choker to the pile and pulling. If necessary, a vibrating

extractor will be used. Once the contractor conducting the removal has an effective method in place, it should take about 30 minutes to extract each pile. To remove all 35 existing piles, noise impacts associated with driving will occur over a period of three days, will be limited to daylight hours, and will not be continuous. As a vibrating extractor may be used, for the purposes of managing potential impacts to marine mammals, the same zones of influence applied to vibratory hammer operations for pile installation will be applied to pile removal operations.

### Pile Installation

A total of 61 steel piles will be installed as part of the Project. These piles will be installed by impact hammer. The largest piles to be installed are 30-inch diameter steel piles, and these would produce the highest sound levels. Twenty-six 30-inch diameter piles will be installed, and noise impacts associated with driving these piles will occur over a period of six days, will be limited to daylight hours, and will not be continuous. In addition, twenty-seven 24-inch steel piles (sixteen of which will be epoxy coated) will be installed for construction of the new ferry maintenance facility, and the driving of these piles will occur over a period of six days, overlapping with the days driving the 30-in diameter piles, will be limited to daylight hours, and will not be continuous. Finally, eight 18-inch epoxy coated steel piles will be installed, and pile driving for these piles will occur over a single day, will be limited to daylight hours, and will not be continuous.

The Project will also include installation of 24 plastic piles, which are 18 inches in diameter. A vibratory hammer will be used to install these plastic piles. Sound pressure waves resulting from the driving of plastic piles are different than those of steel piles. In comparison to steel piles, pressure levels produced from plastic piles hit with a hammer have lesser extremes in overpressure and underpressure in the sound waveform. Vibratory hammers produce sound

pressure levels (SPLs) that are considerably lower than those produced by impact hammers. Specific data on vibratory hammer sound levels for driving plastic piles could not be located, but installation of the plastic piles with a vibratory hammer, instead of an impact hammer, is less likely to produce sound that would result in injury to or mortality of marine mammals. In total, the installation of all of the piles, including the steel piles and the plastic piles, will occur over a period of ten days, will be limited to daylight hours, and will not be continuous.

Description of Marine Mammals in the Area of the Specified Activity

The marine mammal species under NMFS jurisdiction most likely to occur in the proposed construction area include Pacific harbor seal (<u>Phoca vitulina richardsi</u>) and California sea lion (<u>Zalophus californianus</u>). Although harbor porpoise (<u>Phocoena phocoena</u>), killer whale (<u>Orcinus orca</u>), and gray whale (<u>Eschrichtius robustus</u>) have been sighted near the vicinity of the proposed construction area, their presence at the activity area is considered unlikely, because the proposed construction area is not typical habitat for these species. The southern sea otter (<u>Enhydra lutris</u>) also may occur in the proposed construction area, but that species is managed by the U.S. Fish and Wildlife Service and is not considered further in this proposed IHA notice. A list of the marine mammal species under NMFS jurisdiction and their abundance and Endangered Species Act (ESA) status is provided in Table 1.

General information on the marine mammal species found in California waters can be found in Caretta et al. (2013), which is available at the following URL: <a href="http://www.nmfs.noaa.gov/pr/sars/pdf/po2012.pdf">http://www.nmfs.noaa.gov/pr/sars/pdf/po2012.pdf</a>. Refer to that document for information on these species. Specific information concerning these species in the vicinity of the proposed

action area is provided below.

Table 1. List of Marine Mammal Species under NMFS Jurisdiction that Occur in the Vicinity of the WETA Central Bay Operations and Maintenance Facility Project Area

Common Name	Scientific Name	Stock	ESA Status	Abundance
California sea lion	Zalophus californianus	U.S.	Not listed	296,750
Harbor seal	Phoca vitulina richardsi	California	Not listed	30,196

#### California Sea Lion

California sea lions in San Francisco Bay are part of the U.S. stock, which begins at the U.S./Mexico border and extends northward into Canada. The U.S. stock was estimated at 296,750 in the 2012 Stock Assessment Report (SAR) and may be at carrying capacity, although more data are needed to verify that determination (Carretta et al. 2013). Because different age and sex classes are not all ashore at any given time, the population assessment is based on an estimate of the number of births and number of pups in relation to the known population. The current population estimate is derived from visual surveys conducted in 2007 of the different age and sex classes observed ashore at the primary rookeries and haul-out sites in southern and central California, coupled with an assessment done in 2008 of the number of pups born in the southern California rookeries (Carretta et al. 2013). California sea lions' occurrence at the proposed project area is not common, but their presence is expected.

California sea lions are not listed under the ESA.

### Harbor Seal

Harbor seals are members of the true seal family (Phocidae). For management purposes, differences in mean pupping date (Temte 1986), movement patterns (Jeffries 1985; Brown 1988), pollutant loads (Calambokidis et al. 1985), and fishery interactions have led to the recognition of three separate harbor seal stocks along the west coast of the continental U.S. (Boveng 1988). The three distinct stocks are: (1) inland waters of Washington State (including Hood Canal, Puget Sound, Georgia Basin, and the Strait of Juan de Fuca out to Cape Flattery),

(2) outer coast of Oregon and Washington, and (3) California (Carretta <u>et al.</u> 2011). Harbor seals found in the vicinity of the proposed action area belong to the California stock.

Pacific harbor seals display year-round site fidelity, though they have been known to swim several hundred miles to find food or suitable breeding habitat. Although generally solitary in the water, harbor seals come ashore at haul-outs that are used for resting, thermoregulation, birthing, and nursing pups. Haul-out sites are relatively consistent from year to year (Kopec and Harvey 1995), and females have been recorded returning to their own natal haul-out when breeding (Green et al. 2006).

In the vicinity of the proposed project area, harbor seals use the westernmost tip of Breakwater Island as a haul-out site and forage in the Breakwater Gap area. The tip is approximately 1 mile west of the Project site. Although it is not considered a primary haul-out site for San Francisco Bay, Breakwater Island is reportedly the only haul-out site in the central Bay that is accessible to seals throughout the full tidal range. Aerial surveys of seal haul-outs conducted in 1995-97 and incidental counts made during summer tern foraging studies conducted in 1984-93 usually counted fewer than 10 seals present at any one time. There is some evidence that more harbor seals have been using the westernmost tip of Breakwater Island in recent years, or that it is more important as a winter haul-out. Seventy-three seals were counted on Breakwater Island in January 1997, and 20 were observed hauled-out on April 4, 1998. A small pup was observed during May 1997; however, site characteristics are not ideal for the island to be a major pupping area (USFWS 1998).

Harbor seals have also been using an abandoned small craft marina dock located at the Project site for haul-out purposes. This dock was previously connected to land, which may have decreased its desirability for use by seals, due to access by people, dogs, and other animals. The

dock has been deteriorating over time, because it is not maintained. In 2010, the portion connecting the floating dock to land broke off and sank, leaving remnant parts of the floating dock isolated from land. Since 2010, additional remnant parts of the marina have also been lost. At present, seals have been observed by local residents hauling out on the portion of the dock that is furthest from shore.

Harbor seals are not listed under the ESA.

Potential Effects of the Specified Activity on Marine Mammals

This section includes a summary and discussion of the ways that the types of stressors associated with the specified activity (in-water pile removal and pile driving) have been observed to impact marine mammals. This discussion may also include reactions that we consider to rise to the level of a take and those that we do not consider to rise to the level of a take (for example, with acoustics, we may include a discussion of studies that showed animals not reacting at all to sound or exhibiting barely measurable avoidance). This section is intended as a background of potential effects and does not consider either the specific manner in which this activity will be carried out or the mitigation that will be implemented, and how either of those will shape the anticipated impacts from this specific activity. The "Estimated Take by Incidental Harassment" section later in this document will include a quantitative analysis of the number of individuals that are expected to be taken by this activity. The "Negligible Impact Analysis" section will include the analysis of how this specific activity will impact marine mammals and will consider the content of this section, the "Estimated Take by Incidental Harassment" section, the "Proposed Mitigation" section, and the "Anticipated Effects on Marine Mammal Habitat" section to draw conclusions regarding the likely impacts of this activity on the reproductive success or survivorship of individuals and from that on the affected marine mammal populations or stocks.

# **Acoustic Impacts**

When considering the influence of various kinds of sound on the marine environment, it is necessary to understand that different kinds of marine life are sensitive to different frequencies of sound. Based on available behavioral data, audiograms have been derived using auditory evoked potentials, anatomical modeling, and other data, Southall et al. (2007) designate "functional hearing groups" for marine mammals and estimate the lower and upper frequencies of functional hearing of the groups. The functional groups and the associated frequencies are indicated below (though animals are less sensitive to sounds at the outer edge of their functional range and most sensitive to sounds of frequencies within a smaller range somewhere in the middle of their functional hearing range):

- Low frequency cetaceans (13 species of mysticetes): functional hearing is estimated to occur between approximately 7 Hz and 22 kHz (however, a study by Au et al. (2006) of humpback whale songs indicate that the range may extend to at least 24 kHz);
- Mid-frequency cetaceans (32 species of dolphins, six species of larger toothed whales, and 19 species of beaked and bottlenose whales): functional hearing is estimated to occur between approximately 150 Hz and 160 kHz;
- High frequency cetaceans (eight species of true porpoises, six species of river dolphins, Kogia, the franciscana, and four species of cephalorhynchids): functional hearing is estimated to occur between approximately 200 Hz and 180 kHz; and
- Pinnipeds in Water: functional hearing is estimated to occur between
   approximately 75 Hz and 75 kHz, with the greatest sensitivity between approximately
   700 Hz and 20 kHz.

As mentioned previously in this document, two marine mammal species (both of which are pinniped species) are likely to occur in the proposed seismic survey area. WETA and NMFS determined that in-water pile removal and pile driving during the Central Bay Operations and Maintenance Facility Project has the potential to result in behavioral harassment of the marine mammal species and stocks in the vicinity of the proposed activity.

Marine mammals exposed to high-intensity sound repeatedly or for prolonged periods can experience hearing threshold shift (TS), which is the loss of hearing sensitivity at certain frequency ranges (Kastak et al. 1999; Schlundt et al. 2000; Finneran et al. 2002; 2005). TS can be permanent (PTS), in which case the loss of hearing sensitivity is unrecoverable, or temporary (TTS), in which case the animal's hearing threshold will recover over time (Southall et al. 2007). Since marine mammals depend on acoustic cues for vital biological functions, such as orientation, communication, finding prey, and avoiding predators, hearing impairment could result in the reduced ability of marine mammals to detect or interpret important sounds. Repeated noise exposure that causes TTS could lead to PTS.

Experiments on a bottlenose dolphin (<u>Tursiops truncates</u>) and beluga whale (<u>Delphinapterus leucas</u>) showed that exposure to a single watergun impulse at a received level of 207 kPa (or 30 psi) peak-to-peak (p-p), which is equivalent to 228 dB (p-p) re 1 μPa, resulted in a 7 and 6 dB TTS in the beluga whale at 0.4 and 30 kHz, respectively. Thresholds returned to within 2 dB of the pre-exposure level within 4 minutes of the exposure (Finneran <u>et al.</u> 2002). No TTS was observed in the bottlenose dolphin. Although the source level of one hammer strike for pile driving is expected to be much lower than the single watergun impulse cited here, animals being exposed for a prolonged period to repeated hammer strikes could receive more

noise exposure in terms of sound exposure level (SEL) than from the single watergun impulse (estimated at 188 dB re 1  $\mu$ Pa<sup>2</sup>-s) in the aforementioned experiment (Finneran et al. 2002).

Chronic exposure to excessive, though not high-intensity, noise could cause masking at particular frequencies for marine mammals that utilize sound for vital biological functions (Clark et al. 2009). Masking is the obscuring of sounds of interest by other sounds, often at similar frequencies. Masking generally occurs when sounds in the environment are louder than, and of a similar frequency as, auditory signals an animal is trying to receive. Masking can interfere with detection of acoustic signals, such as communication calls, echolocation sounds, and environmental sounds important to marine mammals. Therefore, under certain circumstances, marine mammals whose acoustical sensors or environment are being severely masked could also be impaired.

Masking occurs at the frequency band which the animals utilize. Since noise generated from in-water vibratory pile removal and driving is mostly concentrated at low frequency ranges, it may have little effect on high-frequency echolocation sounds by odontocetes (toothed whales), which may hunt California sea lion and harbor seal. However, the lower frequency man-made noises are more likely to affect the detection of communication calls and other potentially important natural sounds, such as surf and prey noise. The noises may also affect communication signals when those signals occur near the noise band, and thus reduce the communication space of animals (e.g., Clark et al. 2009) and cause increased stress levels (e.g., Foote et al. 2004; Holt et al. 2009).

Unlike TS, masking can potentially impact the species at community, population, or even ecosystem levels, as well as individual levels. Masking affects both senders and receivers of the signals and could have long-term chronic effects on marine mammal species and populations.

Recent science suggests that low frequency ambient sound levels in the world's oceans have increased by as much as 20 dB (more than 3 times, in terms of SPL) from pre-industrial periods, and most of these increases are from distant shipping (Hildebrand 2009). All anthropogenic noise sources, such as those from vessel traffic and pile removal and driving, contribute to the elevated ambient noise levels, thus intensifying masking.

Nevertheless, the sum of noise from WETA's proposed Central Bay Operations and Maintenance Facility Project construction activities is confined to a limited area by surrounding landmasses; therefore, the noise generated is not expected to contribute to increased ocean ambient noise. In addition, due to shallow water depths in the project area, underwater sound propagation of low-frequency sound (which is the major noise source from pile driving) is expected to be poor.

Finally, in addition to TS and masking, exposure of marine mammals to certain sounds could lead to behavioral disturbance (Richardson et al. 1995), such as: changing durations of surfacing and dives, number of blows per surfacing, or moving direction and/or speed; reduced/increased vocal activities; changing/cessation of certain behavioral activities, such as socializing or feeding; visible startle response or aggressive behavior, such as tail/fluke slapping or jaw clapping; avoidance of areas where noise sources are located; and/or flight responses (e.g., pinnipeds flushing into water from haulouts or rookeries).

The biological significance of many of these behavioral disturbances is difficult to predict, especially if the detected disturbances appear minor. However, the consequences of behavioral modification could be expected to be biologically significant if the change affects growth, survival, or reproduction. Some of these types of significant behavioral modifications include:

- Drastic change in diving/surfacing patterns (such as those thought to be causing beaked whale strandings due to exposure to military mid-frequency tactical sonar);
- Habitat abandonment due to loss of desirable acoustic environment; and
- Cessation of feeding or social interaction.

The onset of behavioral disturbance from anthropogenic noise depends on both external factors (characteristics of noise sources and their paths) and the receiving animals (hearing, motivation, experience, demography), and is therefore difficult to predict (Southall et al. 2007).

The proposed project area is not a prime habitat for marine mammals, nor is it considered an area frequented by marine mammals. Therefore, behavioral disturbances that could result from anthropogenic noise associated with WETA's construction activities are expected to affect only a small number of marine mammals on an infrequent and limited basis.

### Visual Disturbance

The activities of workers in the project area may also cause behavioral reactions by marine mammals, such as pinnipeds flushing from the jetty or pier or moving farther from the disturbance to forage. There is a riprap breakwater that starts at the Alameda shoreline southeast of the proposed facility that harbor seals use as a haul-out site and to forage in the breakwater gap area. However, observations of the area show that it is unlikely that more than 10 to 20 individuals of harbor seals (or California sea lions) would be present in the project vicinity at any one time. Therefore, even if pinnipeds were flushed from the haul-out, a stampede is very unlikely, due to the relatively low number of animals onsite. In addition, proposed mitigation and monitoring measures would minimize the startle behavior of pinnipeds and prevent the animals from flushing into the water.

Anticipated Effects on Marine Mammal Habitat

No permanent impacts to marine mammal habitat are proposed to or would occur as a result of the proposed Project. The WETA's proposed Central Bay Operations and Maintenance Facility Project would not modify the existing habitat. Therefore, no restoration of the habitat would be necessary. A temporary, small-scale loss of foraging habitat may occur for marine mammals, if the marine mammals leave the area during pile extraction and driving activities.

Acoustic energy created during pile replacement work would have the potential to disturb fish within the vicinity of the pile replacement work. As a result, the affected area could temporarily lose foraging value to marine mammals. During pile driving, high noise levels may exclude fish from the vicinity of the pile driving. Hastings and Popper (2005) identified several studies that suggest fish will relocate to avoid areas of damaging noise energy. The acoustic frequency and intensity ranges that have been shown to negatively impact fish (FHWG 2008) and an analysis of the potential noise output of the proposed Project indicate that Project noise has the potential to cause temporary hearing loss in fish over a distance of approximately 42 meters from pile driving activity. If fish leave the area of disturbance, pinniped habitat in that area may have temporarily decreased foraging value when piles are driven using impact hammering.

The duration of fish avoidance of this area after pile driving stops is unknown. However, the affected area represents an extremely small portion of the total foraging range of marine mammals that may be present in and around the project area.

Because of the short duration of the activities and the relatively small area of the habitat that may be affected, the impacts to marine mammals and the food sources that they utilize are not expected to cause significant or long-term consequences for individual marine mammals or marine mammal populations.

## **Proposed Mitigation**

In order to issue an incidental take authorization (ITA) under section 101(a)(5)(D) of the MMPA, NMFS must set forth the permissible methods of taking pursuant to such activity, and other means of effecting the least practicable impact on such species or stock and its habitat, paying particular attention to rookeries, mating grounds, and areas of similar significance, and on the availability of such species or stock for taking for certain subsistence uses (where relevant).

For WETA's proposed Central Bay Operations and Maintenance Facility Project, WETA worked with NMFS and proposed the following mitigation measures to minimize the potential impacts to marine mammals in the Project vicinity. The primary purposes of these mitigation measures are to minimize sound levels from the activities, to monitor marine mammals within designated zones of influence corresponding to NMFS' current Level B harassment thresholds and, if marine mammals with the ZOI appear disturbed by the work activity, to initiate immediate shutdown or power down of the piling hammer, making it very unlikely potential injury or TTS to marine mammals would occur and ensuring that Level B behavioral harassment of marine mammals would be reduced to the lowest level practicable.

# <u>Use of Noise Attenuation Devices</u>

Noise attenuation systems (i.e., bubble curtains) will be used during all impact pile driving of steel piles to dampen the acoustic pressure and reduce the impact on marine mammals. By reducing underwater sound pressure levels at the source, bubble curtains would reduce the area over which Level B harassment would occur, thereby potentially reducing the numbers of marine mammals affected. In addition, the bubble curtain system would reduce sound levels below the threshold for injury (Level A harassment), and thus eliminate the need for an exclusion zone for Level A harassment.

# **Time Restrictions**

Work would occur only during daylight hours, when visual monitoring of marine mammals can be conducted.

In addition, all in-water construction will be limited to the period between August 1 and November 30, 2015.

## Establishment of Level B Harassment Zones of Influence

Before the commencement of in-water pile driving activities, WETA shall establish Level B behavioral harassment zones of influence (ZOIs) where received underwater sound pressure levels (SPLs) are higher than 160 dB (rms) and 120 dB (rms) re 1 μPa for impulse noise sources (impact pile driving) and non-impulses noise sources (vibratory pile driving and mechanic dismantling), respectively. The ZOIs delineate where Level B harassment would occur. Because of the relatively low source levels from vibratory pile driving and from impact pile driving with air bubble curtains, there will be no area where the noise level would exceed the threshold for Level A harassment for pinnipeds, which is 190 dB (rms) re 1 μPa. The modeled maximum isopleths for ZOIs are listed in Table 2.

Table 2. Modeled Level B harassment zones of influence for various pile driving activities

Pile Driving Methods	Pile Material and Size	Distance to 120 dB re 1	Distance to 160 dB re 1
Pile Driving Methods		μPa (rms) (m)	μPa (rms) (m)
Impact pile driving with air bubble curtain	30" epoxy coated steel piles	NA	250
	24" epoxy coated steel piles	NA	185
	18" epoxy coated steel piles	NA	93
Vibratory pile driving	18" plastic fender piles	2,154	NA

Once the underwater acoustic measurements are conducted during initial test pile driving, WETA shall adjust the sizes of the ZOIs, and monitor these zones as described under the Proposed Monitoring section below.

## Soft Start

A "soft-start" technique is intended to allow marine mammals to vacate the area before the pile driver reaches full power. Whenever there has been downtime of 30 minutes or more without pile driving, the contractor will initiate the driving with ramp-up procedures described below.

For vibratory hammers, the contractor will initiate the driving for 15 seconds at reduced energy, followed by a 1-minute waiting period. This procedure shall be repeated two additional times before continuous driving is started. This procedure would also apply to vibratory pile extraction.

For impact driving, an initial set of three strikes would be made by the hammer at 40 percent energy, followed by a 1-minute waiting period, then two subsequent three-strike sets at 40 percent energy, with 1-minute waiting periods, before initiating continuous driving.

### Shutdown Measures

Although no marine mammal exclusion zone exists, due to the implementation of noise attenuation devices (i.e., bubble curtains), WETA shall discontinue pile driving or pile removal activities if a marine mammal within a ZOI appears disturbed by the work activity. Work may not resume until the animal is seen to leave the ZOI or 30 minutes have passed since the disturbed animal was last sighted.

## **Mitigation Conclusions**

NMFS has carefully evaluated the applicant's proposed mitigation measures and considered a range of other measures in the context of ensuring that NMFS prescribes the means of effecting the least practicable impact on the affected marine mammal species and stocks and their habitat. Our evaluation of potential measures included consideration of the following factors in relation to one another:

- The manner in which, and the degree to which, the successful implementation of the measure is expected to minimize adverse impacts to marine mammals
- The proven or likely efficacy of the specific measure to minimize adverse impacts as planned
- The practicability of the measure for applicant implementation.

Any mitigation measure(s) prescribed by NMFS should be able to accomplish, have a reasonable likelihood of accomplishing (based on current science), or contribute to the accomplishment of one or more of the general goals listed below:

- (1) Avoidance or minimization of injury or death of marine mammals wherever possible (goals 2, 3, and 4 may contribute to this goal).
- (2) A reduction in the numbers of marine mammals (total number or number at biologically important time or location) exposed to received levels of pile driving and pile removal or other activities expected to result in the take of marine mammals (this goal may contribute to 1, above, or to reducing harassment takes only).
- (3) A reduction in the number of times (total number or number at biologically important time or location) individuals would be exposed to received levels of pile driving and pile removal, or other activities expected to result in the take of marine mammals (this goal may contribute to 1, above, or to reducing harassment takes only).
- (4) A reduction in the intensity of exposures (either total number or number at biologically important time or location) to received levels of pile driving, or other activities expected to result in the take of marine mammals (this goal may contribute to a, above, or to reducing the severity of harassment takes only).

- (5) Avoidance or minimization of adverse effects to marine mammal habitat, paying special attention to the food base, activities that block or limit passage to or from biologically important areas, permanent destruction of habitat, or temporary destruction/disturbance of habitat during a biologically important time.
- (6) For monitoring directly related to mitigation an increase in the probability of detecting marine mammals, thus allowing for more effective implementation of the mitigation.

Based on our evaluation of the applicant's proposed measures, as well as other measures considered by NMFS, NMFS has preliminarily determined that the proposed mitigation measures provide the means of effecting the least practicable impact on marine mammals species or stocks and their habitat, paying particular attention to rookeries, mating grounds, and areas of similar significance.

# Proposed Monitoring and Reporting

In order to issue an ITA for an activity, section 101(a)(5)(D) of the MMPA states that NMFS must set forth, "requirements pertaining to the monitoring and reporting of such taking." The MMPA implementing regulations at 50 CFR 216.104 (a)(13) indicate that requests for ITAs must include the suggested means of accomplishing the necessary monitoring and reporting that will result in increased knowledge of the species and of the level of taking or impacts on populations of marine mammals that are expected to be present in the proposed action area. WETA submitted a marine mammal monitoring plan as part of the IHA application. It can be found at <a href="http://www.nmfs.noaa.gov/pr/permits/incidental.htm">http://www.nmfs.noaa.gov/pr/permits/incidental.htm</a>. The plan may be modified or supplemented based on comments or new information received from the public during the public comment period.

Monitoring measures prescribed by NMFS should accomplish one or more of the following general goals:

- (1) An increase in the probability of detecting marine mammals, both within the mitigation zone (thus allowing for more effective implementation of the mitigation) and in general to generate more data to contribute to the analyses mentioned below;
- (2) An increase in our understanding of how many marine mammals are likely to be exposed to levels of pile driving that we associate with specific adverse effects, such as behavioral harassment, TTS, or PTS;
- (3) An increase in our understanding of how marine mammals respond to stimuli expected to result in take and how anticipated adverse effects on individuals (in different ways and to varying degrees) may impact the population, species, or stock (specifically through effects on annual rates of recruitment or survival) through any of the following methods:
  - Behavioral observations in the presence of stimuli compared to observations in the absence of stimuli (need to be able to accurately predict received level, distance from source, and other pertinent information);
  - Physiological measurements in the presence of stimuli compared to observations in the absence of stimuli (need to be able to accurately predict received level, distance from source, and other pertinent information);
  - Distribution and/or abundance comparisons in times or areas with concentrated stimuli versus times or areas without stimuli;
  - (4) An increased knowledge of the affected species; and
- (5) An increase in our understanding of the effectiveness of certain mitigation and monitoring measures.

### **Proposed Monitoring Measures**

WETA shall employee NMFS-approved protected species observers (PSOs) to conduct marine mammal monitoring for its Central Bay Operations and Maintenance Facility Project.

The PSOs will observe and collect data on marine mammals in and around the project area for 30 minutes before, during, and for 30 minutes after all pile removal and pile installation work. If a PSO observes a marine mammal within a ZOI that appears to be disturbed by the work activity, the PSO will notify the work crew to initiate shutdown measures.

Monitoring of marine mammals around the construction site shall be conducted using high-quality binoculars (e.g., Zeiss, 10 x 42 power). Marine mammal visual monitoring shall be conducted from the best vantage point available, including the pier, breakwater, and adjacent docks within the harbor, to maintain an excellent view of the ZOIs and adjacent areas during the survey period. Monitors would be equipped with radios or cell phones for maintaining contact with work crews.

Data collection during marine mammal monitoring will consist of a count of all marine mammals by species, a description of behavior (if possible), location, direction of movement, type of construction that is occurring, time that pile replacement work begins and ends, any acoustic or visual disturbance, and time of the observation. Environmental conditions such as weather, visibility, temperature, tide level, current, and sea state would also be recorded.

## Reporting Measures

WETA would be required to submit weekly monitoring reports to NMFS that summarize the monitoring results, construction activities, and environmental conditions.

A final monitoring report would be submitted to NMFS within 90 days after completion of the construction work. This report would detail the monitoring protocol, summarize the data

recorded during monitoring, and estimate the number of marine mammals that may have been harassed. NMFS would have an opportunity to provide comments on the report, and if NMFS has comments, WETA would address the comments and submit a final report to NMFS within 30 days.

In addition, NMFS would require WETA to notify NMFS' Office of Protected Resources and NMFS' Stranding Network within 48 hours of sighting an injured or dead marine mammal in the vicinity of the construction site. WETA shall provide NMFS with the species or description of the animal(s), the condition of the animal(s) (including carcass condition, if the animal is dead), location, time of first discovery, observed behaviors (if alive), and photo or video (if available).

In the event that WETA finds an injured or dead marine mammal that is not in the vicinity of the construction area, WETA would report the same information as listed above to NMFS as soon as operationally feasible.

Estimated Take by Incidental Harassment

Except with respect to certain activities not pertinent here, the MMPA defines "harassment" as: any act of pursuit, torment, or annoyance which (i) has the potential to injure a marine mammal or marine mammal stock in the wild [Level A harassment]; or (ii) has the potential to disturb a marine mammal or marine mammal stock in the wild by causing disruption of behavioral patterns, including, but not limited to, migration, breathing, nursing, breeding, feeding, or sheltering [Level B harassment].

As discussed above, in-water pile removal and pile driving (vibratory and impact) generate loud noises that could potentially harass marine mammals in the vicinity of WETA's proposed Central Bay Operations and Maintenance Facility Project.

Currently, NMFS uses 120 dB re 1 µPa and 160 dB re 1 µPa at the received levels for the onset of Level B harassment from non-impulse (vibratory pile driving and removal) and impulse sources (impact pile driving) underwater, respectively. Table 3 summarizes the current NMFS marine mammal take criteria.

Table 3. Current Acoustic Exposure Criteria for Non-explosive Sound Underwater

Criterion	Criterion Definition	Threshold
Level A Harassment (Injury)	Permanent Threshold Shift (PTS) (Any level above that which is known to cause TTS)	180 dB re 1 μPa (cetaceans) 190 dB re 1 μPa (pinnipeds) root mean square (rms)
Level B Harassment	Behavioral Disruption (for impulse noises)	160 dB re 1 μPa (rms)
Level B Harassment	Behavioral Disruption (for non-impulse noise)	120 dB re 1 μPa (rms)

As explained above, ZOIs will be established that encompass the areas where received underwater SPLs exceed the applicable thresholds for Level B harassment. There will not be a zone for Level A harassment in this case, because the bubble curtain system will keep all underwater noise below the threshold for Level A harassment.

Incidental take is estimated for each species by estimating the likelihood of a marine mammal being present within a ZOI during active pile removal or driving. Expected marine mammal presence is determined by past observations and general abundance near the project area during the construction window. Typically, potential take is estimated by multiplying the area of the ZOI by the local animal density. This provides an estimate of the number of animals that might occupy the ZOI at any given moment. However, this type of calculation is not applicable in this case, because the ZOI will be relatively small and there is no specific local animal density for harbor seals or California sea lions. Based on observational data, the maximum number of harbor seals observed along the closest breakwater near the project vicinity ranges from 10 to 20 individuals. Observational data on California sea lions are not available,

but they are generally less abundant than harbor seals; therefore, the number of harbor seals will be used to estimate impacts for both species.

While it is unlikely that 10 to 20 individuals would be present inside the ZOI at any one time, given the distance from the nearest haul-out site, as a worst-case, this analysis assumes that up to 20 individuals might be present.

For the Project, the total number of pile removal hours is estimated to not exceed 18 hours over 3 days, and the total number of pile driving hours is estimated to not exceed 60 hours over 10 days. Therefore, the estimated total number of days of activities that might impact marine mammals is 13 days. For the exposure estimate, it is assumed that the highest count of harbor seals observed, and the same number of California sea lions, will be foraging within the ZOI and be exposed multiple times during the Project.

The calculation for marine mammal exposures for this Project is estimated by:

Exposure estimate = N \* (10 days of pile driving activity + 3 days of pile removal activity), where:

N = # of animals potentially present = 20.

This formula results in the following exposure estimate:

Exposure estimate = 20 animals \* 13 days = 260 animals.

Therefore, WETA is requesting authorization for Level B acoustical harassment of up to 260 harbor seals and up to 260 California sea lions due to pile removal and driving. A summary of the take estimates and the proportions of the stocks potentially affected is provided in Table 4.

Table 4. Summary of potential marine mammal takes and percentages of stocks affected.

1 0010 11 0 0111111101	j er perentum mumme mummum umres uma perrentuges er steems urretten.				
	Estimated	Estimated Take by	Abundance	Percentage of Stock	Population
	Density	Level B Harassment	of Stock	Potentially Affected	Trend
California sea lion	NA	260	396,750	0.06%	Stable
Harbor seal	NA	260	30,196	0.86%	Stable

**Analysis and Preliminary Determinations** 

# Negligible Impact

Negligible impact is "an impact resulting from the specified activity that cannot be reasonably expected to, and is not reasonably likely to, adversely affect the species or stock through effects on annual rates of recruitment or survival" (50 CFR 216.103). A negligible impact finding is based on the lack of likely adverse effects on annual rates of recruitment or survival (i.e., population-level effects). An estimate of the number of Level B harassment takes, alone, is not enough information on which to base an impact determination. In addition to considering estimates of the number of marine mammals that might be "taken" through behavioral harassment, NMFS must consider other factors, such as the likely nature of any responses (their intensity, duration, etc.), the context of any responses (critical reproductive time or location, migration, etc.), as well as the number and nature of estimated Level A harassment takes, the number of estimated mortalities, and effects on habitat.

WETA's proposed Central Bay Operations and Maintenance Facility Project would involve pile removal and pile driving activities. Elevated underwater noises are expected to be generated as a result of these activities; however, these noises are expected to result in no mortality or Level A harassment and limited, if any, Level B harassment of marine mammals. WETA would use noise attenuation devices (i.e., bubble curtains) during the impact pile driving, thus eliminating the potential for injury (including PTS) and TTS from impact driving. For vibratory pile removal and pile driving, noise levels are not expected to reach the level that may cause TTS, injury (including PTS), or mortality to marine mammals. Therefore, NMFS does not expect that any animals would experience Level A harassment (including injury or PTS) or Level

B harassment in the form of TTS from being exposed to in-water pile removal and pile driving associated with WETA's construction project.

In addition, WETA's proposed activities are localized and of short duration. The entire project area is limited to WETA's Central Bay Operations and Maintenance Facility near Pier 3 in the City of Alameda. The entire Project would involve the removal of 35 existing concrete piles and installation of a total of 61 steel piles ranging from 18 inches to 30 inches in diameter and 24 plastic piles of 18-inch diameter. The duration for pile removal is expected to be fewer than three days and the duration for pile driving is expected to be fewer than 10 days, for a total of 13 days of activity. The duration for removing each pile would be about 30 minutes, and the duration for driving each pile would be about 10 to 30 minutes for impact steel pile driving and about 10 to 20 minutes for plastic vibratory pile driving. These low-intensity, localized, and short-term noise exposures may cause brief startle reactions or short-term behavioral modification by the animals. These reactions and behavioral changes are expected to subside quickly when the exposures cease. Moreover, the proposed mitigation and monitoring measures are expected to reduce potential exposures and behavioral modifications even further. Additionally, no important feeding and/or reproductive areas for marine mammals are known to be near the proposed action area. Therefore, the take resulting from the proposed Central Bay Operations and Maintenance Project is not reasonably expected to, and is not reasonably likely to, adversely affect the marine mammal species or stocks through effects on annual rates of recruitment or survival.

The Project also is not expected to have significant adverse effects on affected marine mammals' habitat, as analyzed in detail in the "Anticipated Effects on Marine Mammal Habitat" section. The project activities would not modify existing marine mammal habitat. The activities

may cause some fish to leave the area of disturbance, thus temporarily impacting marine mammals' foraging opportunities in a limited portion of the foraging range, but because of the short duration of the activities and the relatively small area of the habitat that may be affected, the impacts to marine mammal habitat are not expected to cause significant or long-term negative consequences.

Based on the analysis contained herein of the likely effects of the specified activity on marine mammals and their habitat, and taking into consideration the implementation of the proposed monitoring and mitigation measures, NMFS preliminarily finds that the total marine mammal take from WETA's Central Bay Operations and Maintenance Facility Project will have a negligible impact on the affected marine mammal species or stocks.

## Small Number

Based on analyses provided above, it is estimated that approximately 260 California sea lions and 260 Pacific harbor seals could be exposed to received noise levels that could cause Level B behavioral harassment from the proposed construction work at the WETA Central Bay Operations and Maintenance Facility in Alameda, CA. These numbers represent approximately 0.06% and 0.86% of the stocks and populations of these species that could be affected by Level B behavioral harassment, respectively (see Table 4 above), which are small percentages relative to the total populations of the affected species or stocks.

Based on the analysis contained herein of the likely effects of the specified activity on marine mammals and their habitat, and taking into consideration the implementation of the mitigation and monitoring measures, which are expected to reduce the number of marine mammals potentially affected by the proposed action, NMFS preliminarily finds that small

numbers of marine mammals will be taken relative to the populations of the affected species or stocks.

Impact on Availability of Affected Species for Taking for Subsistence Uses

There are no subsistence uses of marine mammals in the proposed project area, and thus no subsistence uses impacted by this action. Therefore, NMFS has determined that the total taking of affected species or stocks would not have an unmitigable adverse impact on the availability of such species or stocks for taking for subsistence purposes.

Endangered Species Act (ESA)

No species listed under the ESA are expected to be affected by these activities.

Therefore, NMFS has determined that a section 7 consultation under the ESA is not required.

National Environmental Policy Act (NEPA)

NMFS prepared a draft Environmental Assessment (EA) for the proposed issuance of an IHA, pursuant to NEPA, to determine whether or not this proposed activity may have a significant effect on the human environment. This analysis will be completed prior to the issuance or denial of this proposed IHA.

## **Proposed Authorization**

As a result of these preliminary determinations, NMFS proposes to issue an IHA to WETA for conducting the Central Bay Operations and Maintenance Facility Project, provided the previously mentioned mitigation, monitoring, and reporting requirements are incorporated. The proposed IHA language is provided next.

This section contains a draft of the IHA itself. The wording contained in this section is proposed for inclusion in the IHA (if issued).

(1) This Authorization is valid from August 1, 2015, through July 31, 2016.

- (2) This Authorization is valid only for activities associated with the San Francisco Bay Area Water Emergency Transportation Authority (WETA) Central Bay Operations and Maintenance Facility Project in the City of Alameda, California.
- (3) (A) The species authorized for incidental harassment takings, by Level B harassment only, are: Pacific harbor seal (<u>Phoca vitulina richardsi</u>) and California sea lion (<u>Zalophus californianus</u>).
- (B) This authorization for taking by harassment is limited to the following acoustic sources and from the following activities:
  - Impact and vibratory pile driving;
  - Pile removal; and
  - Work associated with above piling activities.
- (C) The taking of any marine mammal in a manner prohibited under this Authorization must be reported within 24 hours of the taking to the West Coast Regional Administrator, National Marine Fisheries Service (NMFS) at (562) 980-4000, and the Chief of the Permits and Conservation Division, Office of Protected Resources, NMFS, at (301) 427-8401, or her designee, at (301) 427-8401.
- (4) The holder of this Authorization must notify the Chief of the Permits and Conservation Division, Office of Protected Resources, at least 48 hours prior to the start of activities identified in 3(B) (unless constrained by the date of issuance of this Authorization, in which case notification shall be made as soon as possible).
  - (5) Prohibitions
- (A) The taking, by incidental harassment only, is limited to the species listed under condition (3)(A) above and by the numbers listed in Table 4. The taking by Level A harassment,

injury, or death of these species or the taking by harassment, injury, or death of any other species of marine mammal is prohibited and may result in the modification, suspension, or revocation of this Authorization.

- (B) The taking of any marine mammal is prohibited whenever the required protected species observers (PSOs), required by condition 7(a), are not present in conformance with condition 7(a) of this Authorization.
  - (6) Mitigation
  - (A) Use of Noise Attenuation Devices

A pile driving energy attenuator (such as an air bubble curtain system) shall be used for all impact pile driving.

## (B) Time Restriction

In-water construction work shall occur only during daylight hours, when visual monitoring of marine mammals can be conducted.

- (C) Establishment of Level B Harassment Zones of Influence
- (i) Before the commencement of in-water pile driving activities, WETA shall establish Level B behavioral harassment zones of influence (ZOIs) where received underwater sound pressure levels (SPLs) are higher than 160 dB (rms) and 120 dB (rms) re 1 μPa for impulse noise sources (impact pile driving) and non-impulses noise sources (vibratory pile driving and mechanic dismantling), respectively. The modeled isopleths for ZOIs are listed in Table 6.

Table 6. Modeled Level B harassment zones of influence for various pile driving activities

Pile Driving Methods	Pile Material and Size	Distance to 120 dB re 1	Distance to 160 dB re 1	
File Driving Methods		μPa (rms) (m)	μPa (rms) (m)	
Impact pile driving with air bubble curtain	30" epoxy coated steel piles	NA	215	
	24" epoxy coated steel piles	NA	185	
	18" epoxy coated steel piles	NA	93	
Vibratory pile driving	18" plastic fender piles	2,154	NA	

- (ii) Once the underwater acoustic measurements are conducted during initial test pile driving, WETA shall adjust the sizes of the ZOIs, and monitor these zones as described under the Proposed Monitoring section below.
- (D) Monitoring of marine mammals shall take place starting 30 minutes before pile driving begins until 30 minutes after pile driving ends.
  - (E) Soft Start
- (i) When there has been downtime of 30 minutes or more without pile driving, the contractor will initiate the driving with ramp-up procedures described below.
- (ii) For vibratory hammers, the contractor shall initiate the driving for 15 seconds at reduced energy, followed by a 1 minute waiting period. This procedure shall be repeated two additional times before continuous driving is started. This procedure shall also apply to vibratory pile extraction.
- (iii) For impact driving, an initial set of three strikes would be made by the hammer at 40 percent energy, followed by a 1-minute waiting period, then two subsequent three-strike sets at 40 percent energy, with 1-minute waiting periods, before initiating continuous driving.

### (F) Shutdown Measures

Although no marine mammal exclusion zone exists due to the implementation of noise attenuation devices (i.e., bubble curtain), WETA shall discontinue pile removal or pile driving activities if a marine mammal within a ZOI appears disturbed by the work activity. Work may not resume until the animal is seen to leave the ZOI or 30 minutes have passed since the disturbed animal was last sighted.

- (7) Monitoring:
- (A) Protected Species Observers

WETA shall employee NMFS-approved protected species observers (PSOs) to conduct marine mammal monitoring for its construction project. The PSOs will observe and collect data on marine mammals in and around the project area for 30 minutes before, during, and for 30 minutes after all pile removal and pile installation work. If a PSO observes a marine mammal within a ZOI that appears to be disturbed by the work activity, the PSO will notify the work crew to initiate shutdown measures.

- (B) Monitoring of marine mammals around the construction site shall be conducted using high-quality binoculars (e.g., Zeiss, 10 x 42 power).
- (C) Marine mammal visual monitoring shall be conducted from the best vantage point available, including the WETA pier, jetty, and adjacent docks within the harbor, to maintain an excellent view of the ZOIs and adjacent areas during the survey period. Monitors would be equipped with radios or cell phones for maintaining contact with work crews.
- (D) Data collection during marine mammal monitoring shall consist of a count of all marine mammals by species, a description of behavior (if possible), location, direction of movement, type of construction that is occurring, time that pile replacement work begins and ends, any acoustic or visual disturbance, and time of the observation. Environmental conditions such as weather, visibility, temperature, tide level, current, and sea state would also be recorded.
  - (8) Reporting:
- (A) WETA shall submit weekly monitoring reports to NMFS that summarize the monitoring results, construction activities, and environmental conditions.
- (B) WETA shall provide NMFS with a draft monitoring report within 90 days of the conclusion of the construction work. This report shall detail the monitoring protocol, summarize

the data recorded during monitoring, and estimate the number of marine mammals that may have been harassed.

- (C) If comments are received from the NMFS West Coast Regional Administrator or NMFS Office of Protected Resources on the draft report, a final report shall be submitted to NMFS within 30 days thereafter. If no comments are received from NMFS, the draft report will be considered to be the final report.
- (D) In the unanticipated event that the construction activities clearly cause the take of a marine mammal in a manner prohibited by this Authorization (if issued), such as an injury, serious injury, or mortality, WETA shall immediately cease all operations and immediately report the incident to the Supervisor of Incidental Take Program, Permits and Conservation Division, Office of Protected Resources, NMFS, and the West Coast Regional Stranding Coordinators. The report must include the following information:
  - (i) time, date, and location (latitude/longitude) of the incident;
  - (ii) description of the incident;
  - (iii) status of all sound source use in the 24 hours preceding the incident;
- (iv) environmental conditions (e.g., wind speed and direction, sea state, cloud cover, visibility, and water depth);
  - (v) description of marine mammal observations in the 24 hours preceding the incident;
  - (vi) species identification or description of the animal(s) involved;
  - (vii) the fate of the animal(s); and
  - (viii) photographs or video footage of the animal (if equipment is available).

Activities shall not resume until NMFS is able to review the circumstances of the prohibited take. NMFS shall work with WETA to determine what is necessary to minimize the

likelihood of further prohibited take and ensure MMPA compliance. WETA may not resume their activities until notified by NMFS via letter, email, or telephone.

- (E) In the event that WETA discovers an injured or dead marine mammal, and the lead PSO determines that the cause of the injury or death is unknown and the death is relatively recent (i.e., in less than a moderate state of decomposition as described in the next paragraph), WETA will immediately report the incident to the Supervisor of the Incidental Take Program, Permits and Conservation Division, Office of Protected Resources, NMFS, and the West Coast Regional Stranding Coordinators. The report must include the same information identified above.

  Activities may continue while NMFS reviews the circumstances of the incident. NMFS will work with WETA to determine whether modifications in the activities are appropriate.
- (F) In the event that WETA discovers an injured or dead marine mammal, and the lead PSO determines that the injury or death is not associated with or related to the activities authorized in the IHA (e.g., previously wounded animal, carcass with moderate to advanced decomposition, or scavenger damage), WETA shall report the incident to the Supervisor of the Incidental Take Program, Permits and Conservation Division, Office of Protected Resources, NMFS, and the West Coast Regional Stranding Coordinators, within 24 hours of the discovery. WETA shall provide photographs or video footage (if available) or other documentation of the stranded animal sighting to NMFS and the Marine Mammal Stranding Network. WETA can continue its operations under such a case.
- (9) This Authorization may be modified, suspended or withdrawn if the holder fails to abide by the conditions prescribed herein or if the authorized taking is having more than a negligible impact on the species or stock of affected marine mammals, or if there is an unmitigable adverse impact on the availability of such species or stocks for subsistence uses.

(10) A copy of this Authorization must be in the possession of each contractor who

performs construction activities as part of the WETA Central Bay Operations and Maintenance

Facility Project.

Request for Public Comments

NMFS requests comment on our analysis, the draft authorization, and any other aspect of

the Notice of Proposed IHA for WETA. Please include with your comments any supporting data

or literature citations to help inform our final decision on WETA's request for an MMPA

authorization.

Dated: September 11, 2014.

Donna S. Wieting,

Director,

Office of Protected Resources,

National Marine Fisheries Service.

[FR Doc. 2014-22174 Filed 09/16/2014 at 8:45 am; Publication Date: 09/17/2014]

38